

I Claim:

1. A locking connector for electrically connecting segments of electrical conductors, comprising:
  - a housing for receiving a first electrical conductor;
  - a coupler for connecting to a second electrical conductor mounted in a substantially co-axial engagement with the housing; and
  - a locking assembly mounted between the housing and the coupler for locking the housing in relation to the coupler and disengaging the housing from a locked engagement with the coupler.
2. The device of Claim 1, wherein said housing encloses at least one insulated insert adapted for engaging said first electrical conductor.
3. The device of Claim 2, wherein said at least one insert defines a central cavity, and wherein a plurality of tension fingers are secured in said central cavity, said tension fingers gripping said first electrical conductor and retaining said first conductor in a stationary position in relation to said housing.
4. The device of Claim 3, wherein an electrical conductive pin is secured in said cavity of said at least one insert in contact with said tension fingers for transmitting an electrical signal from said first electrical conductor outside of said housing.
5. The device of Claim 4, wherein a second insulated insert is mounted in a central opening of said coupler, said second insert defining a central cavity, and wherein a plurality of tension fingers are secured in said central cavity, said tension fingers gripping said pin of said at least one insert.

6. The device of Claim 5, wherein an electrical conductive pin is secured in said cavity of said second insert in contact with said tension fingers for transmitting an electrical signal from said first electrical conductor and from said pin of said at least one insert to the second electrical conductor.
7. The device of Claim 2, wherein said insert is provided with gripping projections on an exterior surface thereof, said projections extending a distance from an inner wall of said housing for engaging insulating covering of said first electrical conductor and retaining said first electrical conductor in a stationary position in relation to said housing.
8. The device of Claim 1, wherein said locking assembly comprises a generally cylindrical body with an outwardly extending flange, a compression spring mounted between said flange and said housing and a plurality of locking members moving between cutouts formed in said cylindrical body, when the housing is locked in its position in relation to said coupler, and an annular groove formed in an inner wall of said housing when the housing is in a slideable position in relation to said coupler.  
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9. The device of Claim 8, wherein said comprises a generally cylindrical body provided with an annular groove for receiving at least a portion of said locking members therein when the housing is in a locked position.
10. The device of Claim 9, wherein said coupler is provided with means for connecting said coupler to the second electrical conductor.
11. The device of Claim 10, wherein said connecting means comprises threads formed in at least a portion of an inner wall of said coupler.
12. The device of Claim 11, wherein said connecting means comprises a plurality of circumferential projections formed on an exterior wall of said coupler.

13. The device of Claim 1, wherein said housing comprises means for connecting to the first electrical conductor.
14. The device of Claim 13, wherein said means for connecting the housing to the first electrical conductor comprises threads formed on an exterior end portion of said housing.
15. The device of Claim 13, wherein said means for connecting the housing to the first electrical conductor comprises circumferential projections formed on an exterior end portion of said housing.
16. A locking connector for electrically connecting segments of electrical conductors, comprising:
  - a housing for receiving a first electrical conductor;
  - a coupler for connecting to a second electrical conductor mounted in a substantially co-axial engagement with the housing; and
  - 5 a locking assembly mounted between the housing and the coupler for locking the housing in relation to the coupler and disengaging the housing from a locked engagement with said coupler, said locking assembly comprising a generally cylindrical body with an outwardly extending flange, a compression spring mounted between said flange and said housing and a plurality of locking members moving between cutouts formed in said cylindrical body, when the housing is locked in its position in relation to said coupler, and an annular groove 10 formed in an inner wall of said housing when the housing is in a slidable position in relation to said coupler.
17. The device of Claim 16, wherein said housing encloses at least one insulated insert adapted for engaging said first electrical conductor, said at least one insert defining a central cavity, and wherein a plurality of tension fingers are secured in said central cavity, said tension

5        fingers gripping said first electrical conductor and retaining said first conductor in a stationary position in relation to said housing, said insert further comprising an electrical conductive pin secured in said cavity in contact with said tension fingers for transmitting an electrical signal from said first electrical conductor outside of said housing.

18. The device of Claim 16, wherein said housing encloses at least one insulated insert adapted for engaging said first electrical conductor, said insert being provided with gripping projections on an exterior surface thereof, said projections extending a distance from an inner wall of said housing for engaging insulating covering of said first electrical conductor and retaining said first electrical conductor in a stationary position in relation to said housing.

5        19. A connector for providing a quick connect/disconnect engagement between segments of coaxial cables, the connector comprising:  
a housing for receiving a first electrical conductor of a first segment of a coaxial cable, said housing defining a central opening therein;  
5        a coupler for connecting to a second electrical conductor of a second segment of a coaxial cable, said coupler mounted in a substantially co-axial engagement with the housing; and a locking assembly mounted between the housing and the coupler for locking the housing in relation to the coupler and disengaging the housing from a locked engagement with said coupler, while permitting a limited sliding movement between said housing and said coupler, said locking assembly comprising a generally cylindrical body with an outwardly extending flange, a compression spring mounted between said flange and said housing and a plurality of locking members moving between cutouts formed in said cylindrical body, when the housing is locked in its position in relation to said coupler, and an annular groove

formed in an inner wall of said housing when the housing is in a slidable position in  
15 relation to said coupler.

20. The device of Claim 19, wherein an insulating insert is mounted in said central opening of the housing, said insert carrying a means for engaging said first electrical conductor and allowing said first electrical conductor to extend through said housing and said coupler and for transmitting an electrical signal from said first electrical conductor to said second  
5 electrical conductor.

21. The device of Claim 20, wherein said insert is provided with a plurality of gripping projections for gripping said first conductor and retaining the conductor in a stationary position in relation to said housing.